Serial No.: 10/582,304
Filed: April 20, 2007
Page: 2 of 13

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application;

Listing of Claims:

- (Original) An antibody comprising two heavy chain variable regions and two light chain variable regions, wherein the antibody is a single chain polypeptide having a binding activity against human leukocyte antigen (HLA).
- 2. (Original) The antibody of claim 1, wherein the two heavy chain variable regions and two light chain variable regions are arranged in the order of heavy chain variable region, light chain variable region, heavy chain variable region, and light chain variable region, starting from the N terminus of the single chain polypeptide.
- (Currently amended) The antibody of claim 1, <u>further comprising linkers between the variable regions, wherein the two heavy chain variable regions and two light-chain variable regions are linked by a linker.</u>
- (Currently amended) The antibody of claim 3, wherein <u>each of</u> the linkers comprise[[s]] 15 amino acids.
 - 5. (Previously presented) The antibody of claim 1, wherein HLA is HLA class I.
 - 6. (Original) The antibody of claim 5, wherein HLA class I is HLA-A.
 - 7. (Previously presented) The antibody of claim 1, wherein the antibody is sc(Fv)2.

Serial No.: 10/582,304 Filed: April 20, 2007 Page: 3 of 13

(Original) An sc(Fv)2 comprising heavy chain variable regions that comprise CDR1,
 and 3 consisting of the amino acid sequences of SEQ ID NOs; 3, 4, and 5.

- (Original) An sc(Fv)2 comprising light chain variable regions that comprise CDR 1,
 and 3 consisting of the amino acid sequences of SEQ ID NOs: 6, 7, and 8.
- 10. (Original) An sc(Fv)2 comprising heavy chain variable regions that comprise CDR1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 3, 4, and 5, and light chain variable regions that comprise CDR 1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 6, 7, and 8.
 - 11. 16. (Canceled)
 - 17. (Withdrawn) A polynucleotide encoding the antibody of claim 1.
- 18. (Withdrawn) A polynucleotide that hybridizes with the polynucleotide of claim 17 under stringent conditions, and encodes an antibody having a binding activity against human leukocyte antigen (HLA).
 - 19. (Withdrawn) A vector comprising the polynucleotide of claim 17.
 - 20. (Withdrawn) A host cell carrying the polynucleotide of claim 17.
- 21. (Withdrawn-Currently amended) A method for producing the antibody of claim 1, wherein the method comprises the steps of:
 - (a) providing host cells preparing an HLA-recognizing antibody;

Serial No.: 10/582,304 Filed: April 20, 2007 Page: 4 of 13

(b) producing a vector comprising a polynucleotide encoding the antibody of claim 1-based on the sequence of the antibody prepared in (a);

(c) introducing the vector of (b) into host cells; and

[[(d)]](b) culturing the host cells so that they produce the antibody-of (e).

- (Previously presented) A pharmaceutical composition comprising the antibody of claim 1 as an active ingredient.
- 23. (Currently amended) The composition of claim 22, wherein the agent antibody has cell death inducing activity against B cells or T cells.
- 24. (Previously presented) The composition of claim 23, wherein the B cells or T cells are activated B cells or activated T cells.

25. - 28. (Canceled)

- 29. (Withdrawn) The method of claim 21, wherein the antibody is sc(Fv)2, and the heavy chain variable regions comprise CDR1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 3, 4, and 5.
- 30. (Withdrawn) The method of claim 21, wherein the antibody is sc(Fv)2, and the light chain variable regions comprise CDR1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 6, 7, and 8.
- 31. (Withdrawn) The method of claim 21, wherein the antibody is sc(Fv)2; the heavy chain variable regions comprise CDR1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 3, 4, and 5; and the light chain variable regions comprise CDR1, 2, and 3 consisting of the amino acid sequences of SEQ ID NOs: 6, 7, and 8.

Serial No.: 10/582,304 Filed: April 20, 2007 Page: 5 of 13

32. (Previously presented) A pharmaceutical composition comprising the sc(Fv)2 of claim 8 as an active ingredient,

33. (Previously presented) A pharmaceutical composition comprising the sc(Fv)2 of claim 9 as an active incredient.

34. (Previously presented) A pharmaceutical composition comprising the sc(Fv)2 of claim 10 as an active ingredient.

35. (Withdrawn) A method of treating a tumor in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 22, wherein the composition induces cell death or inhibits cell growth of a tumor in the subject.

36. (Withdrawn) The method of claim 35, wherein the tumor is a blood tumor.

37. (Withdrawn) A method of treating a tumor in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 32, wherein the composition induces cell death or inhibits cell growth of a tumor in the subject.

38. (Withdrawn) The method of claim 37, wherein the tumor is a blood tumor.

39. (Withdrawn) A method of treating a tumor in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 33, wherein the composition induces cell death or inhibits cell growth of a tumor in the subject.

40. (Withdrawn) The method of claim 39, wherein the tumor is a blood tumor.

Serial No.: 10/582,304
Filed: April 20, 2007
Page: 6 of 13

41. (Withdrawn) A method of treating a tumor in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 34, wherein the composition induces cell death or inhibits cell growth of a tumor in the subject.

- 42. (Withdrawn) The method of claim 41, wherein the tumor is a blood tumor.
- 43. (Withdrawn) A method of treating an autoimmune disease in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 25, thereby treating the autoimmune disease in the subject.
- 44. (Withdrawn) A method of treating an autoimmune disease in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 32, thereby treating the autoimmune disease in the subject.
- 45. (Withdrawn) A method of treating an autoimmune disease in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 33, thereby treating the autoimmune disease in the subject.
- 46. (Withdrawn) A method of treating an autoimmune disease in a subject in need thereof, comprising administering to the subject an effective dose of the pharmaceutical composition of claim 34, thereby treating the autoimmune disease in the subject.